

On Brennan's conjecture for a special class of functions

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Abstract

In this paper, we prove Brennan's conjecture for conformal mappings f of the disk $\{z : |z| < 1\}$ assuming that the Taylor coefficients of the function $\log(zf'(z)/f(z))$ at zero are nonnegative. We also obtain inequalities for the integral means over the circle $|z| = r$ of the squared modulus of the function $zf'(z)/f(z)$. © 2005 Springer Science+Business Media, Inc.

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Keywords

Brennan's conjecture, Conformal mapping, Fractal boundary, Koebe function, Univalent analytic function